<u>AMENDMENT TO THE CLAIMS</u>

1.   (Currently Amended) A method of extracting key frames from a video sequence, wherein the video sequence comprises compressed video data having motion vectors; the method comprising the steps of:

generating, <u>for each frame of a plurality of frames of the video sequence,</u> global motion signals based on the motion vectors<u>, wherein the global motion signals are representative of a global motion of the frame</u>;

<u>determining for each frame of the plurality of frames of the video sequence, a dominant direction of the global motion of the frame from</u> ~~generating dominant global direction clusters based on said~~ <u>the</u> generated global motion signals <u>associated with the frame</u>;

<u>clustering the plurality of frames according to their determined dominant directions</u>;

selecting key frames ~~using said generated dominant global direction clusters~~ <u>from the clusters of frames</u>; and

decompressing [[said]] <u>the</u> selected key frames to obtain [[said]] <u>the</u> extracted key frames.

2.   (Currently Amended) A method as claimed in claim 1, wherein said selecting step comprises selecting key frames <u>from the clusters</u> using ~~said generated dominant global direction clusters and~~ a set of predefined rules.

3.   (Currently Amended) A method as claimed in claim 1, wherein said selecting step comprises the substeps of:

selecting potential key frames of the video sequence <u>from the clusters</u> using ~~said generated dominant global direction clusters and~~ a first set of predefined rules; and

removing redundant key frames from [[said]] <u>the</u> selected potential key frames using a second set of predefined rules resulting in [[said]] <u>the</u> selected key frames.

4.   (Currently Amended) A method as claimed in claim 1, wherein said selecting step comprises the substeps of:

selecting potential key frames of the video sequence <u>from the clusters</u> using ~~said generated dominant global direction clusters and~~ a first set of predefined rules;

removing redundant key frames from [[said]] <u>the</u> selected potential key frames using a second set of predefined heuristic rules resulting in a set of [[said]] selected potential key frames; and

removing similar and/or repeated key frames from [[said]] <u>the</u> set of selected <u>potential</u> key frames using a colour histogram technique resulting in [[said]] <u>the</u> selected key frames.

5.   (Currently Amended) A method as claimed in claim 1, wherein said step of generating global motion signals ~~comprise~~ <u>comprises</u> generating, <u>for each frame of the plurality of frames of the video sequence,</u> a pan global motion signal, a zoom global motion signal, and a tilt global motion signal.

6. (Currently Amended) A method as claimed in claim 1, wherein [[said]] the dominant global direction ~~clusters comprise one or more of~~ is selected from the group consisting of a pan left, pan right, tilt up, tilt down, zoom in, zoom out and global still ~~motion cluster~~ direction.

7. (Currently Amended) A method as claimed in claim 1, wherein said determining step ~~of generating dominant global direction clusters~~ comprises, for each frame, the sub-steps of:

generating discrete global motion signals from [[said]] the generated global motion signals;

removing noise from [[said]] the generated discrete global motion signals to produce noise reduced discrete global motion signals; and

~~generating~~ determining the dominant ~~global~~ direction ~~clusters based on said~~ of the global motion of the frame from the noise reduced discrete global motion signals associated with the frame.

8. to 13. (Cancelled)

14. (Currently Amended) Apparatus for extracting key frames from a video sequence, wherein the video sequence comprises compressed video data having motion vectors; the apparatus comprising:

means for generating, for each frame of a plurality of frames of the video

sequence, global motion signals based on the motion vectors, wherein the global motion signals are representative of a global motion of the frame;

means for ~~generating dominant global direction clusters based on said~~ determining, for each frame of the plurality of frames of the video sequence, a dominant direction of the global motion of the frame from the generated global motion signals associated with the frame;

means for clustering the plurality of frames according to their determined dominant directions;

means for selecting key frames ~~using said generated dominant global direction clusters~~ from the clusters of frames; and

means for decompressing [[said]] the selected key frames to obtain [[said]] the extracted key frames.

15.   (Cancelled)

16.   (Cancelled)

17.   (Currently Amended) A computer readable medium comprising a computer program for extracting key frames from a video sequence, wherein the video sequence comprises compressed video data having motion vectors; the computer program comprising:

code for generating, for each frame of a plurality of frames of the video

sequence, global motion signals based on the motion vectors, wherein the global motion signals are representative of a global motion of the frame;

code for ~~generating dominant global direction clusters based on said~~ determining, for each frame of the plurality of frames of the video sequence, a dominant direction of the global motion of the frame from the generated global motion signals;

code for clustering the plurality of frames according to their determined dominant directions;

code for selecting key frames ~~using said generated dominant global direction clusters~~ from the clusters of frames; and

code for decompressing [[said]] the selected key frames to obtain [[said]] the extracted key frames.

18.   (Cancelled)

19.   (Cancelled)

20.   (Currently Amended) A method according to claim 1, wherein [[said]] the motion vectors are block motion vectors, and ~~the first~~ said step of generating ~~step~~ global motion signals comprises the steps of:

decompressing the compressed video data to obtain [[said]] the block motion vectors;

converting [[said]] the block motion vectors to forward block motion

vectors;

generating global motion signals based on the forward block motion

vectors.

21.   (Currently Amended) A method according to claim 20, wherein

[[said]] the compressed video data is MPEG compressed video data.

22.   (New) An apparatus for extracting key frames from a video

sequence, said apparatus comprising:

a storage unit for storing the video sequence comprising compressed video

data having motion signals;

a processor coupled to the storage unit and adapted to:

generate, for each frame of a plurality of frames of the video sequence,

global motion signals based on the motion vectors, wherein the global motion signals are

representative of a global motion of the frame;

determine, for each frame fo the plurality of frames of the video sequence, a

dominant direction of the global motion of the frame from the generated global motion

signals associated with the frame;

cluster the plurality of frames according to their determined dominant

directions;

select key frames from the clusters of frames; and

decompress the selected frames to obtain the extracted key frames.